

**ABSTRACT**

Disclosed are therapeutic methods of treating a mammal, e.g., a human patient, having a disease, disorder or condition characterized by abnormal (excessive or insufficient) cartilage growth or skeletal growth. The methods include inhibiting or supplementing activity of TRANCE or TRAF6 in chondrocytes in vivo or ex vivo. Also disclosed are methods of diagnosing a cartilage disorder. The method includes detecting an elevated or reduced level of TRANCE, RANK, or TRAF6 in chondrocytes. Also disclosed are methods of identifying a compound that increases or decreases proliferation of chondrocytes, or a compound that promotes differentiation, e.g., maturation, of chondrocytes.